503p1111 US00
10/528508

FIG. 1

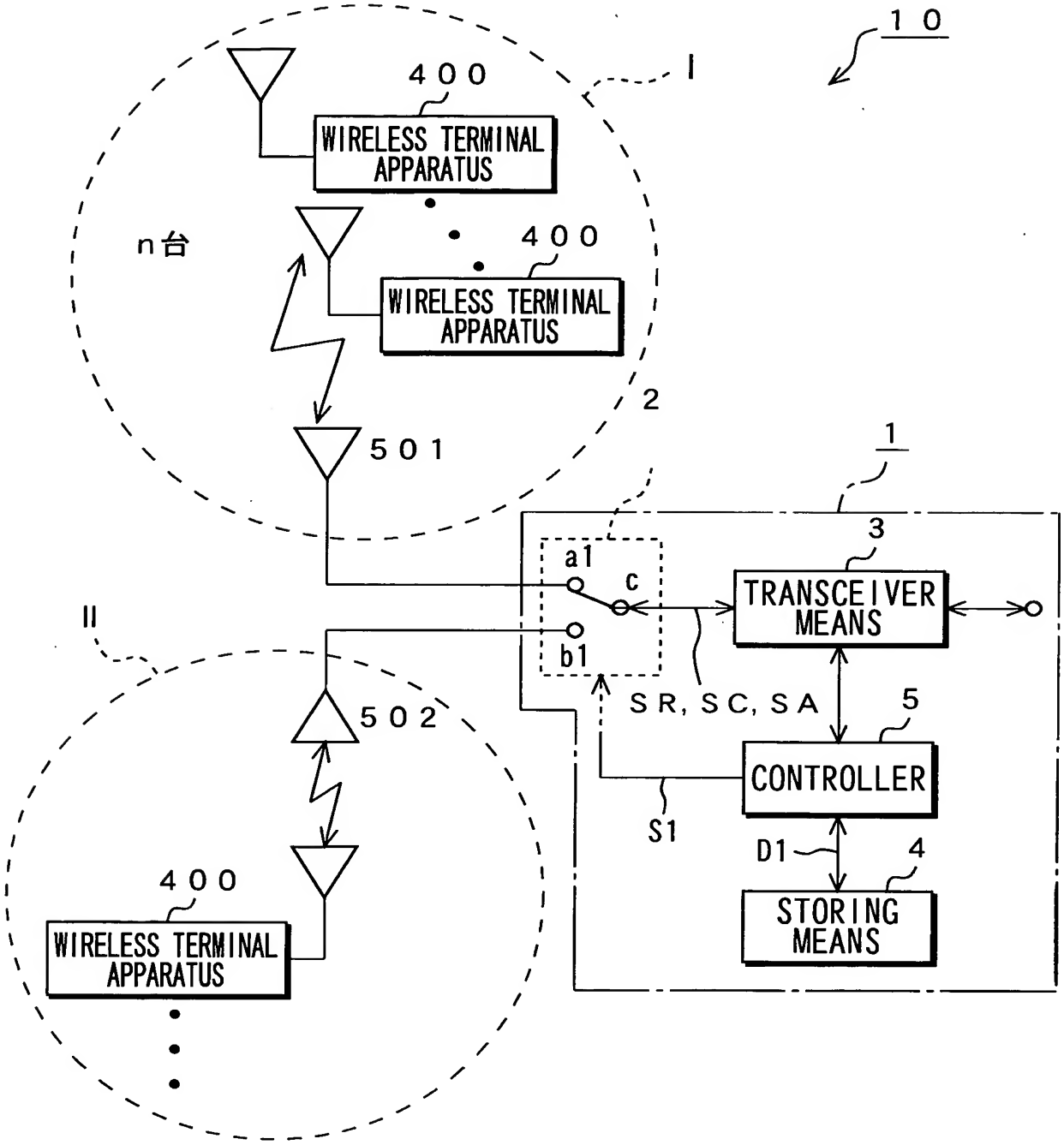
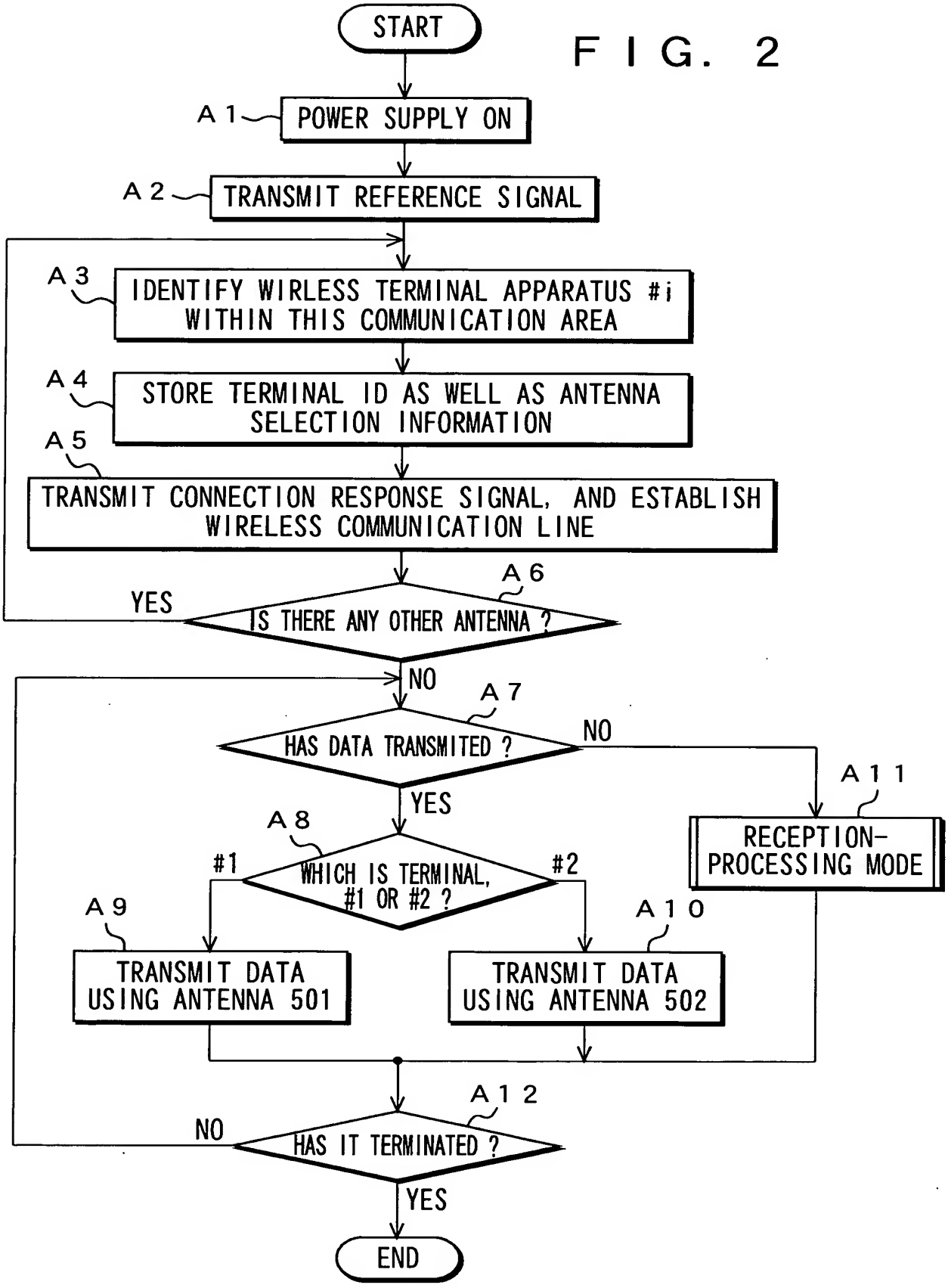


FIG. 2


START
A1
POWER SUPPLY ON
A2
TRANSMIT REFERENCE SIGNAL
A3
IDENTIFY WIRLESS TERMINAL APPARATUS #i WITHIN THIS COMMUNICATION AREA
A4
STORE TERMINAL ID AS WELL AS ANTENNA SELECTION INFORMATION
A5
TRANSMIT CONNECTION RESPONSE SIGNAL, AND ESTABLISH WIRELESS COMMUNICATION LINE
A6
IS THERE ANY OTHER ANTENNA ?
YES
NO
A7
HAS DATA TRANSMITED ?
NO
YES
A11
RECEPTION-PROCESSING MODE
A8
WHICH IS TERMINAL, #1 OR #2 ?
#1
#2
A9
TRANSMIT DATA USING ANTENNA 501
A10
TRANSMIT DATA USING ANTENNA 502
A12
HAS IT TERMINATED ?
NO
YES
END

1

FIG. 3

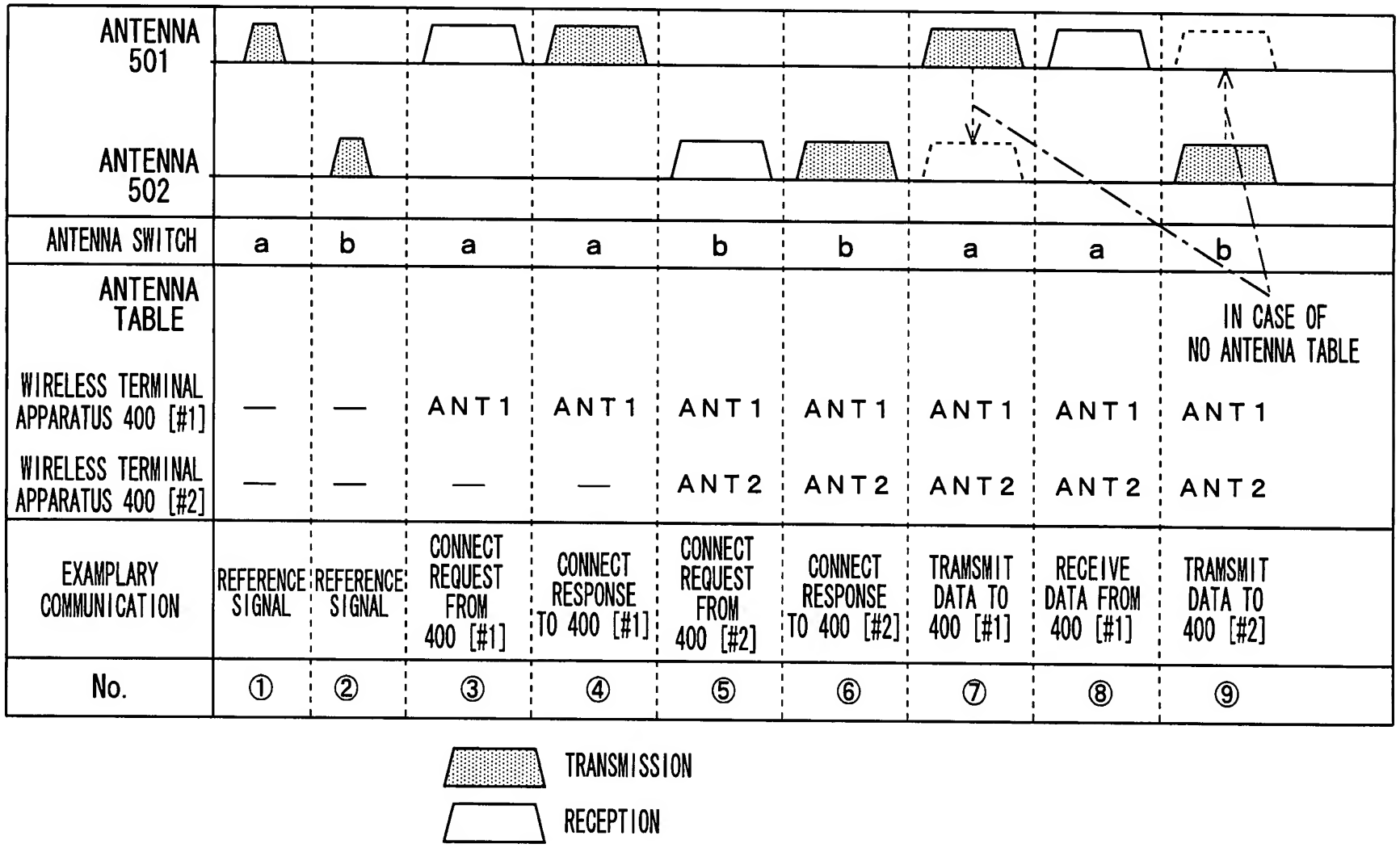

T
ANTENNA 501
ANTENNA 502
ANTENNA SWITCH
a b a a b b a a b
ANTENNA TABLE
IN CASE OF NO ANTENNA TABLE
WIRELESS TERMINAL APPARATUS 400 [#1]
— — ANT1 ANT1 ANT1 ANT1 ANT1 ANT1 ANT1
WIRELESS TERMINAL APPARATUS 400 [#2]
— — — — ANT2 ANT2 ANT2 ANT2 ANT2
EXAMPLARY COMMUNICATION
REFERENCE SIGNAL
REFERENCE SIGNAL
CONNECT REQUEST FROM 400 [#1]
CONNECT RESPONSE TO 400 [#1]
CONNECT REQUEST FROM 400 [#2]
CONNECT RESPONSE TO 400 [#2]
TRAMSMIT DATA TO 400 [#1]
RECEIVE DATA FROM 400 [#1]
TRAMSMIT DATA TO 400 [#2]
No.
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
TRANSMISSION
RECEPTION

FIG. 4

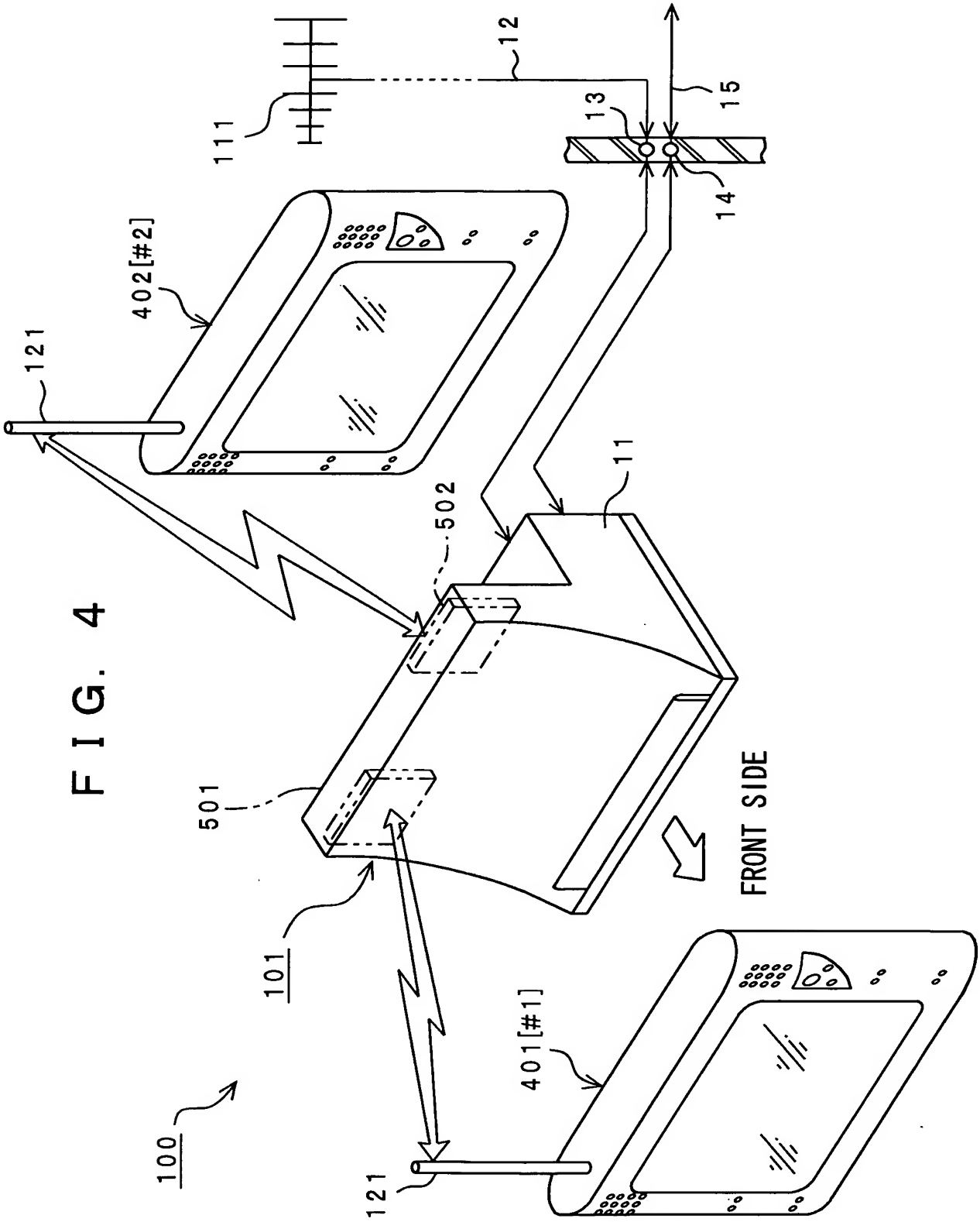
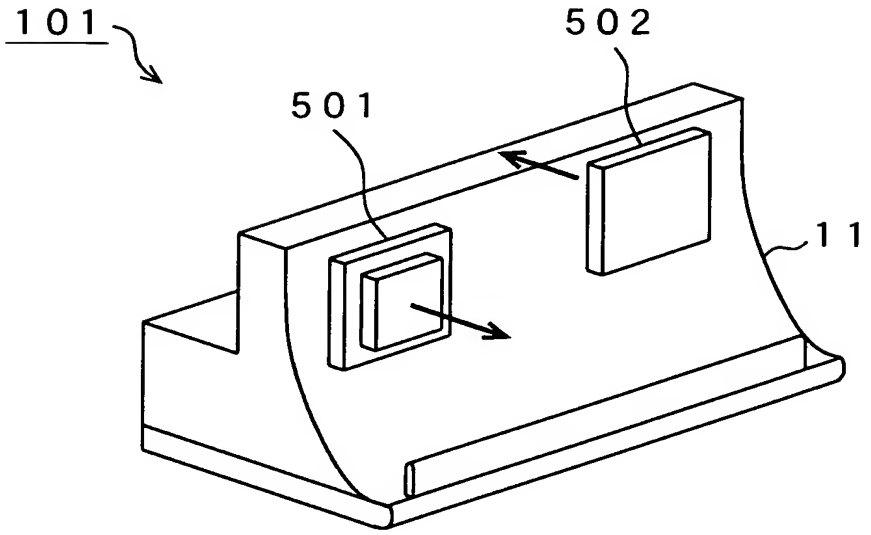


FIG. 5



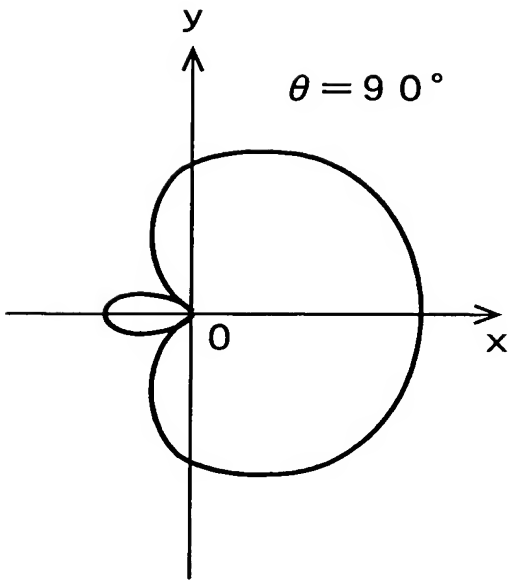


FIG. 6A

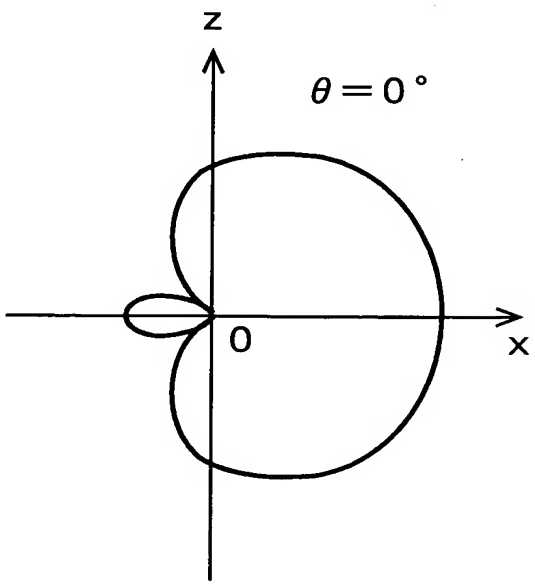


FIG. 6B

FIG. 7

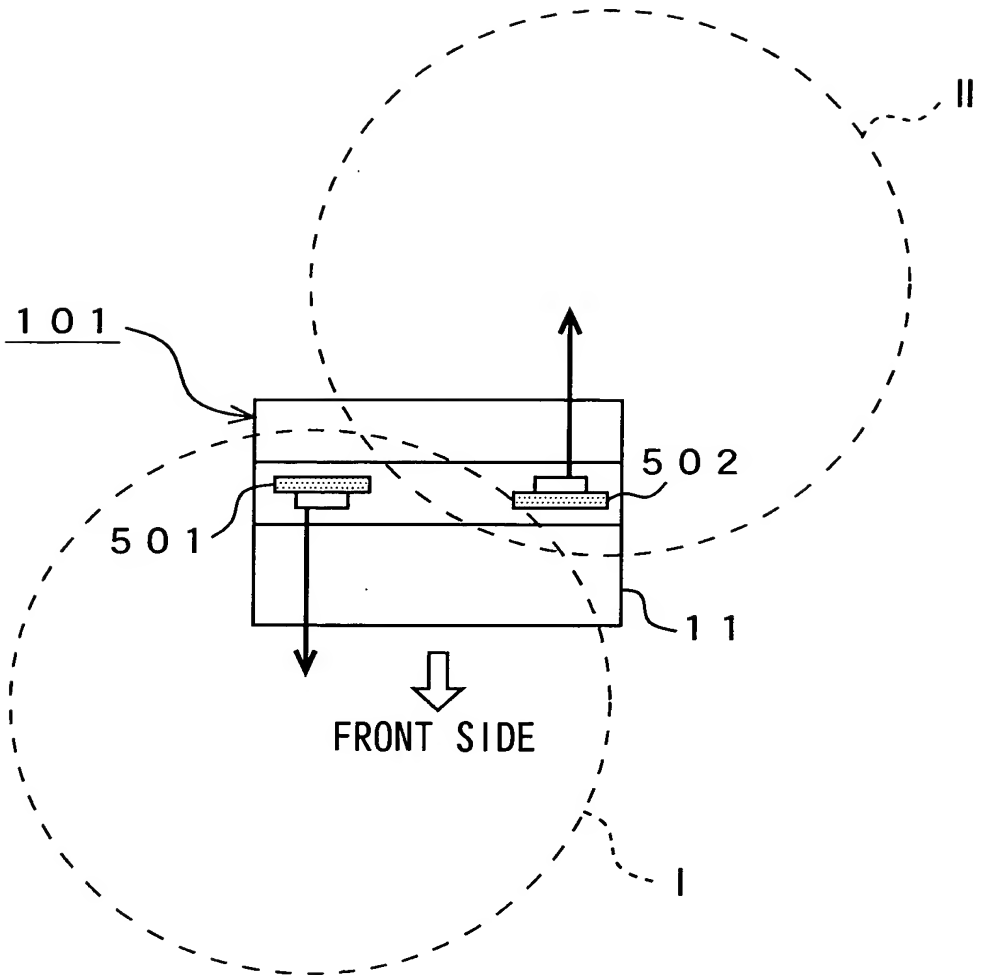


FIG. 8

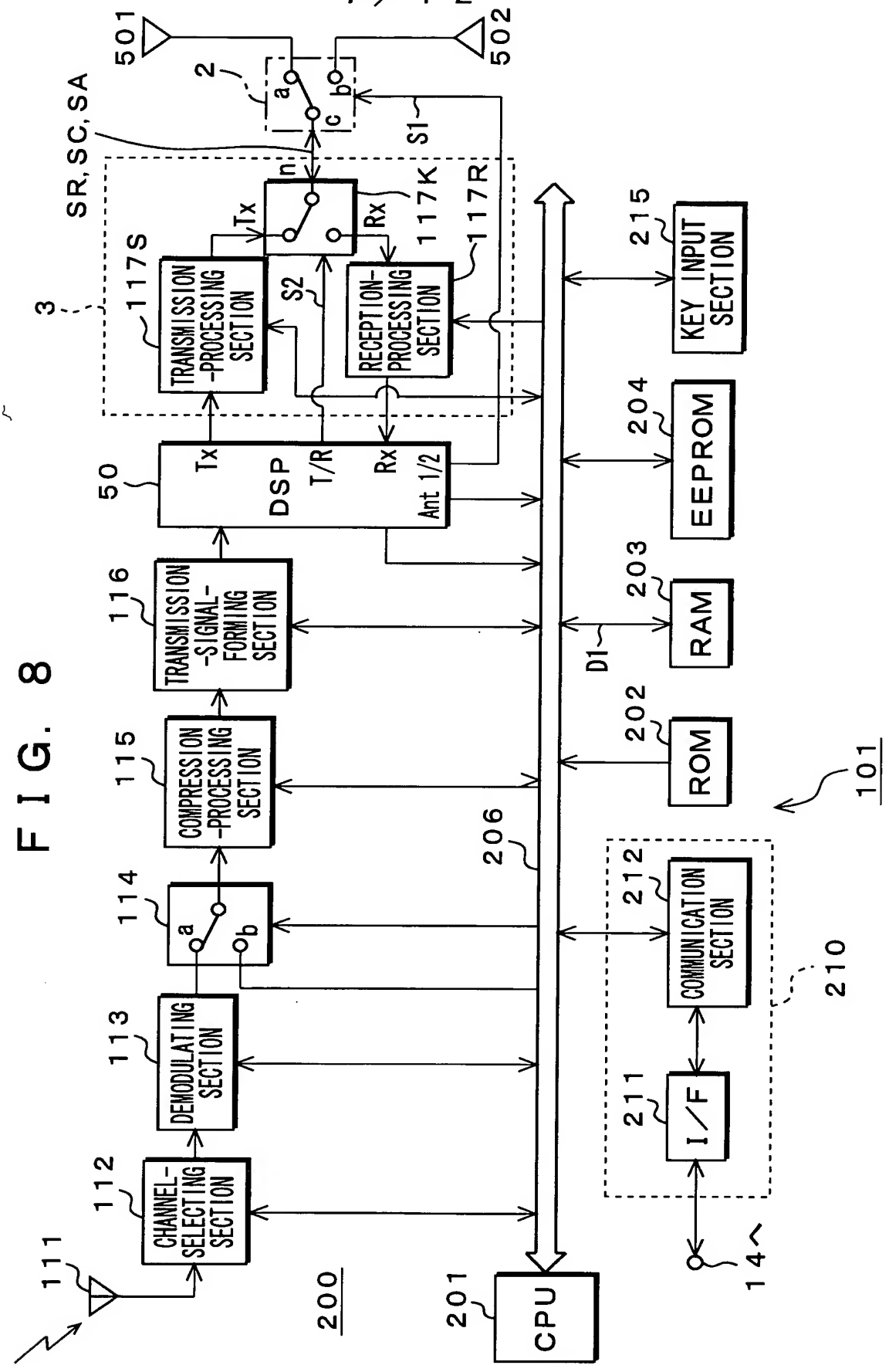

501
502
2
a
b
c
S1
SR, SC, SA
3
n
Tx
Rx
117K
117R
117S
TRANSMISSION -PROCESSING SECTION
S2
RECEPTION- PROCESSING SECTION
215
KEY INPUT SECTION
50
DSP
Tx
T/R
Rx
Ant 1/2
204
EEPROM
116
TRANSMISSION -SIGNAL- FORMING SECTION
203
RAM
D1
115
COMPRESSION -PROCESSING SECTION
202
ROM
101
206
114
a
b
212
COMMUNICATION SECTION
210
113
DEMODULATING SECTION
211
I/F
112
CHANNEL- SELECTING SECTION
14
111
200
201
CPU

FIG. 9

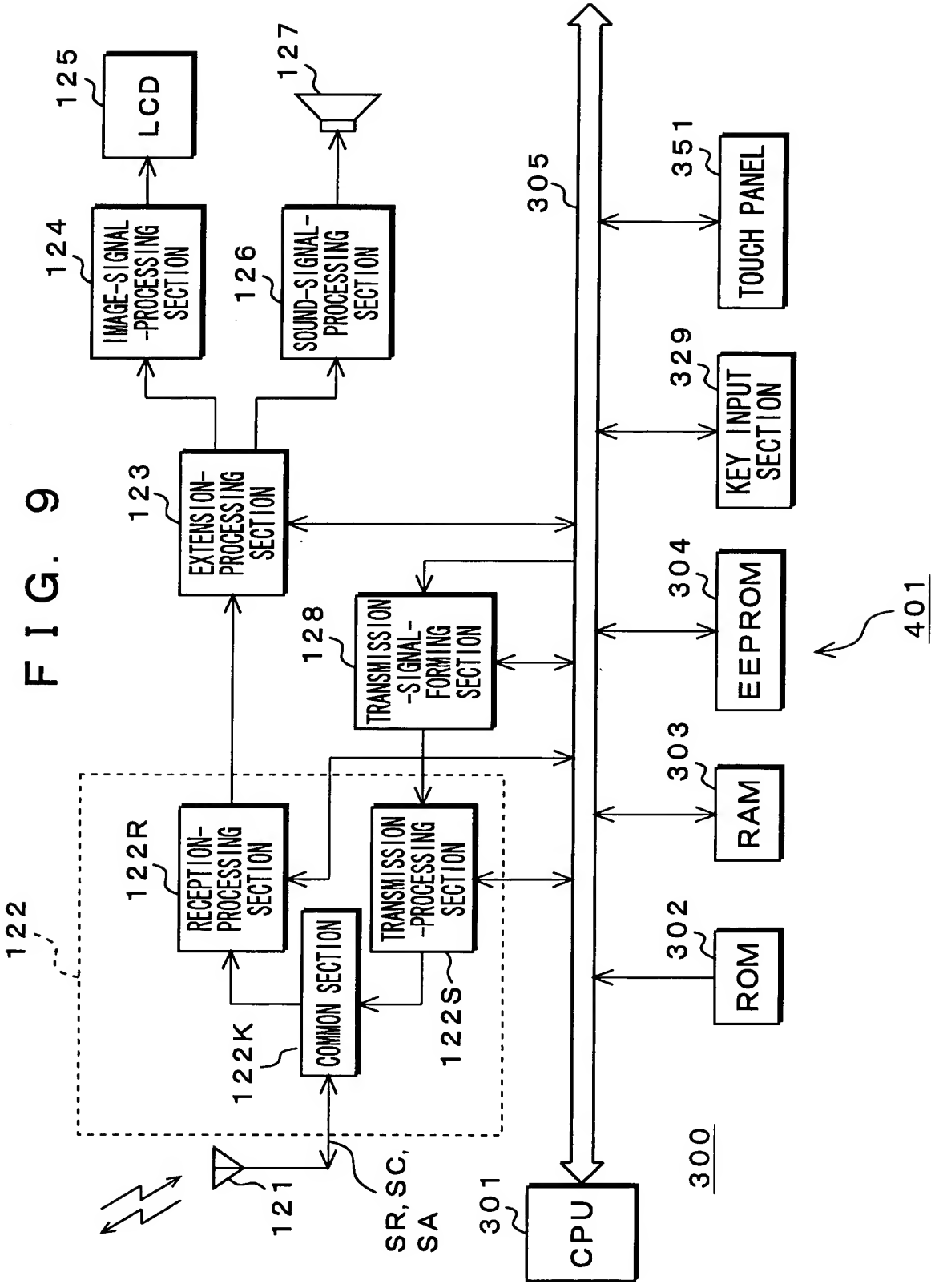

125
LCD
127
124
IMAGE-SIGNAL -PROCESSING SECTION
126
SOUND-SIGNAL-PROCESSING SECTION
305
351
TOUCH PANEL
123
EXTENSION-PROCESSING SECTION
329
KEY INPUT SECTION
128
TRANSMISSION -SIGNAL-FORMING SECTION
304
EEPROM
401
122
122R
RECEPTION-PROCESSING SECTION
TRANSMISSION -PROCESSING SECTION
303
RAM
122K
COMMON SECTION
122S
302
ROM
121
SR, SC, SA
301
CPU
300

FIG. 10

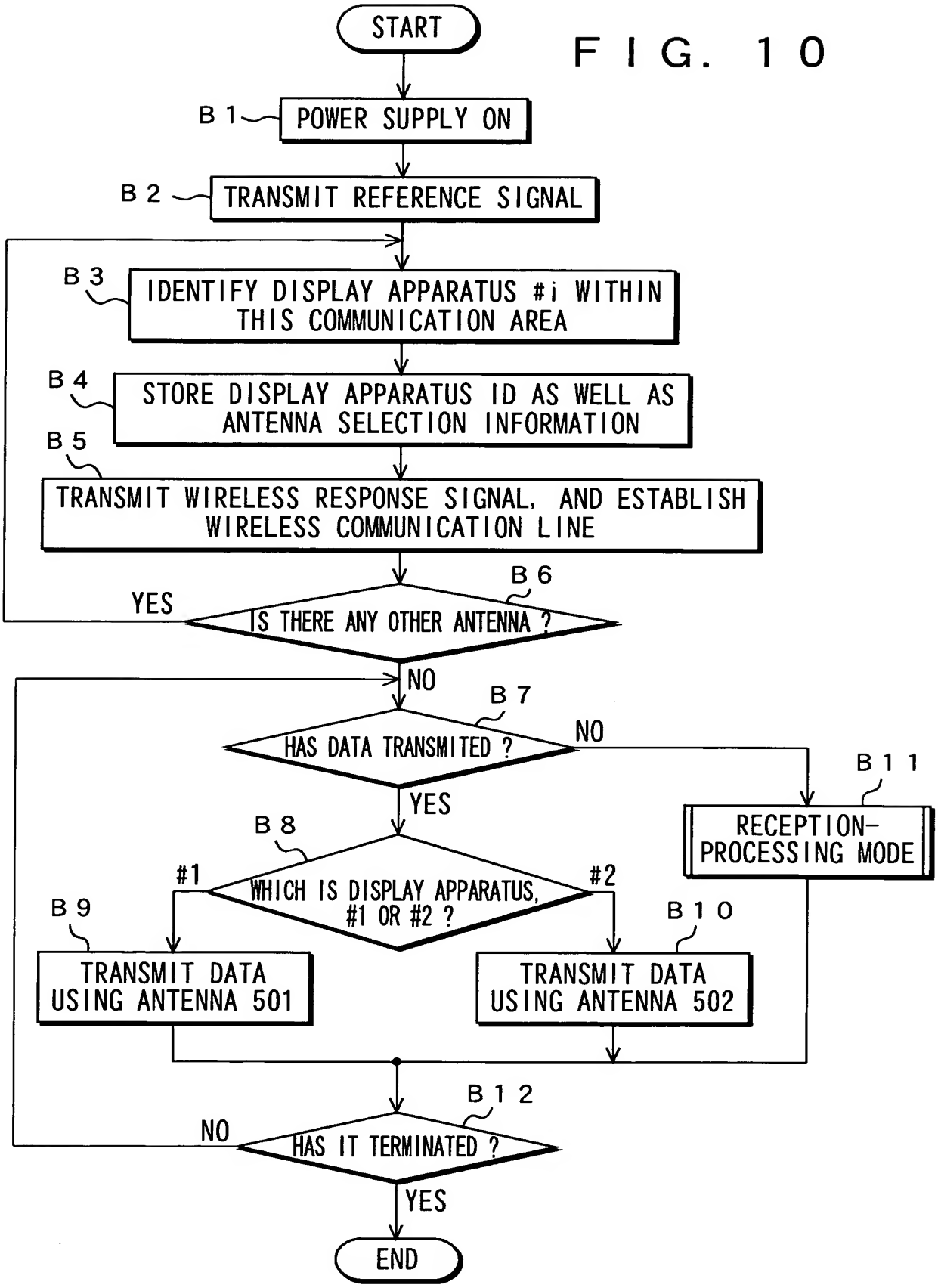

START
B1
POWER SUPPLY ON
B2
TRANSMIT REFERENCE SIGNAL
B3
IDENTIFY DISPLAY APPARATUS #i WITHIN THIS COMMUNICATION AREA
B4
STORE DISPLAY APPARATUS ID AS WELL AS ANTENNA SELECTION INFORMATION
B5
TRANSMIT WIRELESS RESPONSE SIGNAL, AND ESTABLISH WIRELESS COMMUNICATION LINE
B6
YES
IS THERE ANY OTHER ANTENNA ?
NO
B7
HAS DATA TRANSMITED ?
NO
B11
RECEPTION-PROCESSING MODE
YES
B8
#1
WHICH IS DISPLAY APPARATUS, #1 OR #2 ?
#2
B9
TRANSMIT DATA USING ANTENNA 501
B10
TRANSMIT DATA USING ANTENNA 502
B12
NO
HAS IT TERMINATED ?
YES
END

FIG. 11

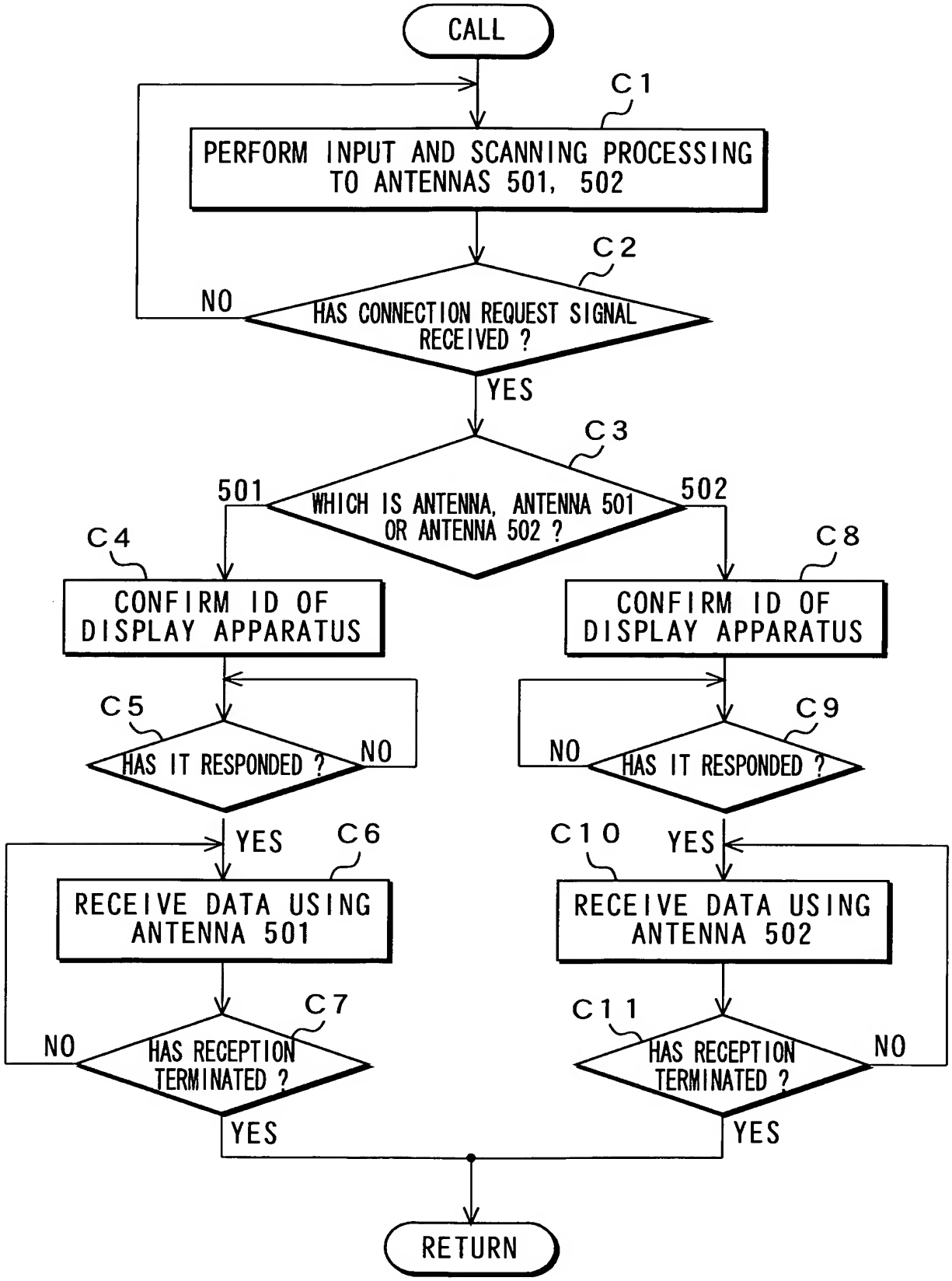

CALL
C1
PERFORM INPUT AND SCANNING PROCESSING TO ANTENNAS 501, 502
C2
NO
HAS CONNECTION REQUEST SIGNAL RECEIVED ?
YES
C3
501
WHICH IS ANTENNA, ANTENNA 501 OR ANTENNA 502 ?
502
C4
CONFIRM ID OF DISPLAY APPARATUS
C8
CONFIRM ID OF DISPLAY APPARATUS
C5
HAS IT RESPONDED ?
NO
C9
NO
HAS IT RESPONDED ?
YES
C6
C10
YES
RECEIVE DATA USING ANTENNA 501
RECEIVE DATA USING ANTENNA 502
C7
C11
NO
HAS RECEPTION TERMINATED ?
HAS RECEPTION TERMINATED ?
NO
YES
YES
RETURN

FIG. 12A

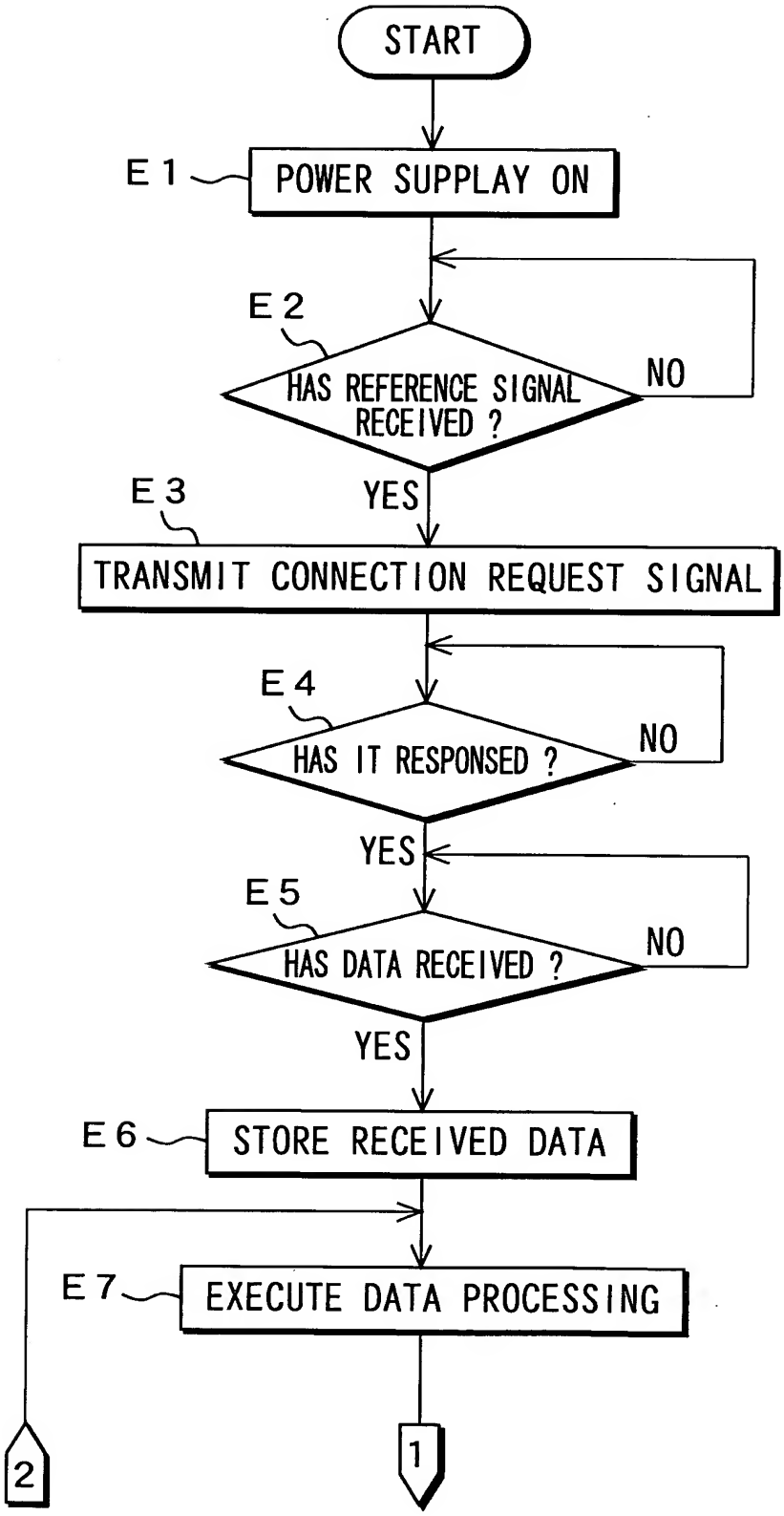
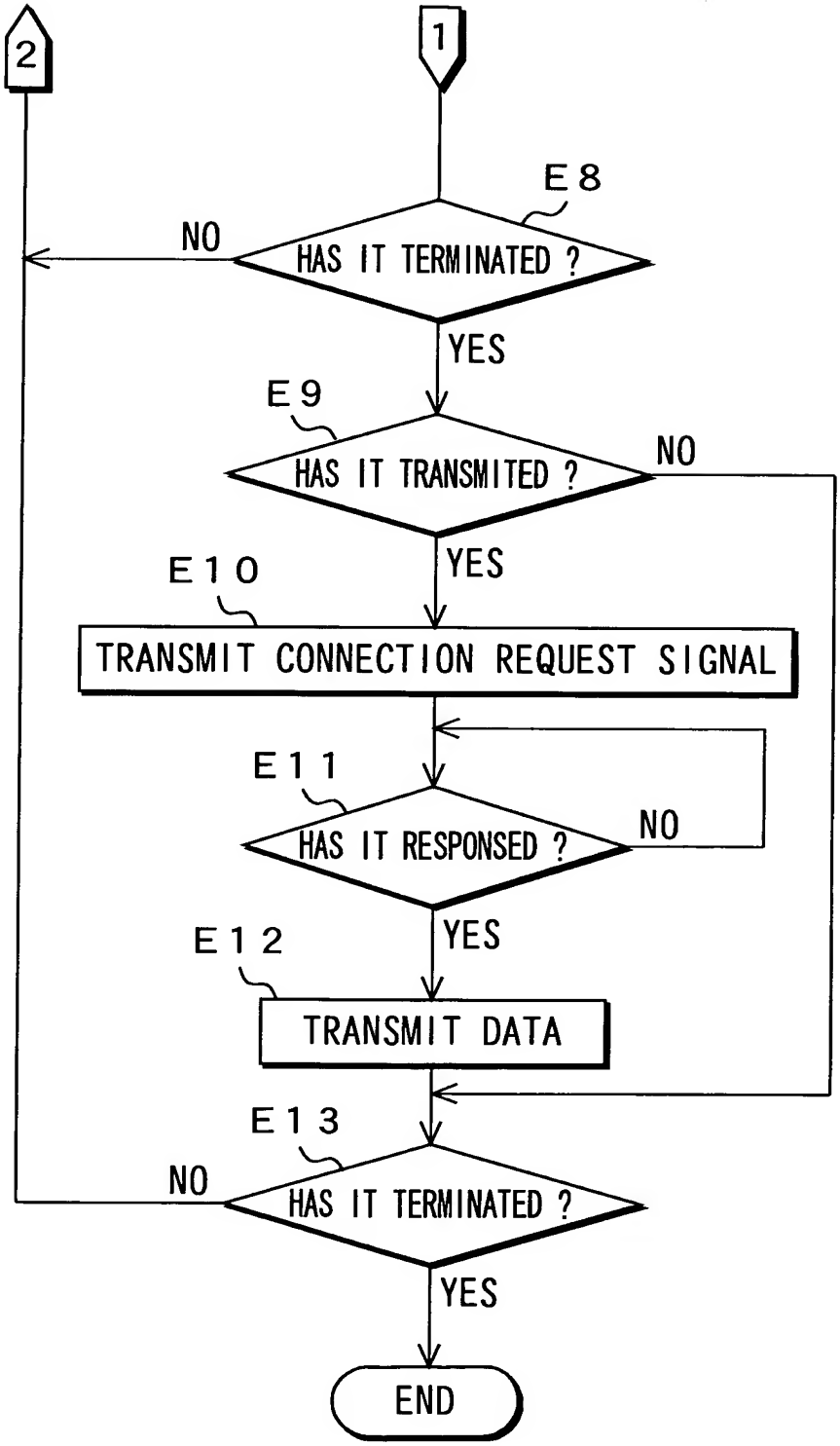

START
E1
POWER SUPPLAY ON
E2
HAS REFERENCE SIGNAL RECEIVED ?
NO
YES
E3
TRANSMIT CONNECTION REQUEST SIGNAL
E4
HAS IT RESPONSED ?
NO
YES
E5
HAS DATA RECEIVED ?
NO
YES
E6
STORE RECEIVED DATA
E7
EXECUTE DATA PROCESSING
2
1

FIG. 12B


2
1
E8
NO
HAS IT TERMINATED ?
YES
E9
HAS IT TRANSMITED ?
NO
YES
E10
TRANSMIT CONNECTION REQUEST SIGNAL
E11
HAS IT RESPONSED ?
NO
YES
E12
TRANSMIT DATA
E13
NO
HAS IT TERMINATED ?
YES
END